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# Introduction

A teacher recently commented on the report card of an eleven-year-old student in her class, stating that, when he "realised the importance of scholastic achievement," his marks would improve. The response to this teacher is contained in the educational theory and research on which this book is based: only when the teacher realises that rather than perpetuating the misguided emphasis on scholastic achievement (i.e., tests and grades), the school's task is to develop the student's underlying cognitive functions (i.e., the ability to learn and become an autonomous thinker) and intrinsic motivation (i.e., love of learning and extension of interests), will education improve. Furthermore, the quality of teacher-student interaction and communication will vitally affect the student's development of the cognitive and motivational functions needed for learning. Conversely, it is through the lack of or insufficient mediated learning that cognitive deficiencies arise. These constructs of mediation and cognitive functions are central to the theory and approaches of Reuven Feuerstein.

#### Who Is Reuven Feuerstein?

Reuven Feuerstein is an internationally renowned Israeli professor of psychology and a scholar in the field of child development. Through his work with low-functioning and disadvantaged individuals, he developed innovative methods of testing and teaching that have been applied worldwide. Along with other contemporary psychologists, he rejects the static belief that individuals are born with a certain intelligence that remains fixed throughout life. In contrast, he has shown that individuals have the potential to change and are modifiable if provided with the opportunities to engage in the right kind of interaction.

Feuerstein has called this "right kind of interaction" mediated learning. Mediated learning permits the individual to develop efficient thinking skills that will enable him or her to become an autonomous and independent learner. In addition, Feuerstein has constructed a list of cognitive functions that are the prerequisites or building blocks of efficient thinking. Together, mediated learning and cognition can pave the way to effective learning.

#### What Is This Book All About?

This book covers the principles and application of Feuerstein's theories of Structural Cognitive Modifiability and Mediated Learning Experience (MLE). Section I, "Mediated Learning," explains the concepts of MLE; invites participatory learning through interaction; evaluates the effectiveness of a learning experience; and provides ideas for implementing MLE in parenting, counselling, and education.

Section II, "Cognitive Functions and Dysfunctions," explains the cognitive functions and dysfunctions; shows the relationship among the input, elaboration, and output phases of thinking; demonstrates how a teacher might identify a student who is experiencing cognitive difficulties in the classroom; provides strategies for the teacher to overcome cognitive difficulties; and links the strategies of "remediation"

to Feuerstein's criteria of mediation.

The ideas and applications presented in this book can be used by anyone concerned with the learning potential of students—parents, caregivers, educators, community workers, school counsellors, and psychologists—to:

- encourage autonomous learning
- unlock a student's potential
- promote the use of effective thinking skills
- develop interactional skills
- improve effective parenting
- remediate cognitive dysfunctions
- analyse a student's cognitive strengths and weaknesses
- encourage metacognition—"thinking about thinking"

## **How to Use This Book**

### Section I: Mediated Learning

In this section, Feuerstein's criteria of MLE are examined from the perspective of the parent, caregiver, teacher, and counsellor. Feuerstein's ten criteria are illustrated in the MLE puzzle on the section cover page. The number of puzzle pieces should not be considered as finite; as new criteria of mediation present themselves, the MLE puzzle should be extended to accommodate them. Furthermore, the individual puzzle pieces do not exist in isolation but should be seen as an integrated whole.

The format is the same for each chapter, each of which deals with a separate criterion.

- each chapter starts with a symbol for and a definition of that criterion
- the Elaboration page repeats the symbol, explains it, provides detailed explanation and discussion of that citerion, and ends with a pertinent quote
- the Example page provides applications of the criterion in the classroom, in the home, and in counselling/community situations

- the Work Pages invite active participation in responding to questions and in applying each criterion to a section of a case study presented in the introduction
- two appendixes close the section—appendix A contains the answers to the work pages, and appendix B contains a rating scale of the MLE criteria for teachers to use in evaluating their teaching according to the mediation principles
- a glossary and references can be found at the end of the book

#### Section II: Cognitive Functions and Dysfunctions

In this section, the cognitive functions are described within Feuerstein's framework of the three phases of the mental act—input, elaboration, and output. Each chapter deals with one phase and lists and discusses all the relevant functions as follows:

- the Description page includes a quote from Feuerstein that explains an aspect of the cognitive function; a graphic that illustrates an expression of that cognitive dysfunction; a detailed description of the cognitive function; the way in which each function interacts and relates to other functions in the different phases; possible classroom difficulties that a learner may experience; and an example describing a particular classroom difficulty
- the Strategies page provides suggestions for overcoming the deficiencies, linking these to the criteria of mediation that were the focus of Section I (these are not meant to be seen as exhaustive); and snippets of interactions between mediators and learners that highlight aspects of the cognitive functions
- each of the three chapters end with four Work Pages
- three appendixes are included at the end of this section, one of which provides answers to the Work Pages while the other two supply different versions of a rating scale